

Title: Topology and Dynamics of the Christiano-Harrison Model

Abstract: The Christiano-Harrison model is a model from macroeconomics that reduces to an upper semicontinuous map $f : [0, 1] \rightarrow 2^{[0,1]}$. For double-sided generalized inverse limits, there is a natural shift homeomorphism on the resulting space. We convert the Christiano-Harrison model to a double-sided generalized inverse limit and investigate the topology and dynamics of this model. We also discuss some general properties of the dynamics on the double-sided generalized inverse limit space induced by the shift homeomorphism.